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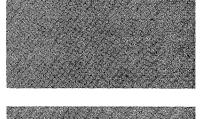
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No. 1312

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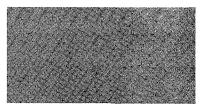
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TRANSLATIONS ON USSR MILITARY AFFAIRS

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LENINIST TEACHING ON DEFENDING THE HOMELAND DISCUSSED

Moscow VOYENNO-ISTORICHESKIY ZHURNAL in Russian No 8, Aug 77 signed to press 25 Jul 77 pp 4-11

[Article by Col (Ret) P. Smirnov, professor and doctor of historical sciences: "The 25th CPSU Congress and the Leninist Doctrine on Defense of the Socialist Homeland"]

[Text] In the Accountability Report at the 25th CPSU Congress Comrade L. I. Brezhnev, General Secretary of the Central Committee of our party, noted that the chief direction of humanity's social progress today is "development of the countries of socialism, growth in their power, and the intensified, beneficial influence of the international policies followed by them." Socialism is confidently winning the hearts and minds of laboring people throughout the world as the most just organization of society. Working people in all countries today are tying their fondest hopes to socialism.

Today, as we go forward toward the 60th anniversary of the Creat October Socialist Revolution, we are especially deeply aware of the full majesty of this victory. "The victory of October," the CPSU Central Committee Decree of 31 January 1977 stresses, "was the chief event of the 20th century and fundamentally changed the course of development of the entire human race. Great October opened a new age, the age of humanity's transition from capitalism to socialism, the age of struggle 'for the liberation of peoples from imperialism, for an end to wars among peoples, for overthrowing the domination of capital, for socialism' (Lenin)".²

The 60th anniversary of October is a triumph for Marxism-Leninism and the life-affirming Leninist doctrine of building a communist society.

The doctrine on defense of the socialist homeland is a constitutent part of Leninism. It includes scientifically substantiated points concerning the essence and characteristic features of the new type of state and the new social order without exploitation and exploiters and it gives a scientific substantiation of ways and means to defend

it against attacks by counterrevolutionary forces. V. I. Lenin emphasized that homeland is a historical category which is constantly changing depending on the changes which take place in the social order.

In defining the word "homeland," the classics of Marxism-Leninism begin with the characteristics of the historical epoch, developmental trends in social life, and the nature of the social, political, and cultural environment. Because under capitalism this environment is fully in the interests of the ruling exploiter classes and is used by them as a weapon with which to enslave and oppress the working people, the founders of Marxism-Leninism came to the only true conclusion: under capitalism the proletariat has no homeland.

The leader of the party and popular masses demonstrated persuasively that in the unjust wars being waged by the imperialist powers the slogan advanced by the bourgeois and petty bourgeois parties calling for defense of the homeland was a shameless deception practiced on the people to conceal the criminal nature of the war and its plundering objective. The working people must win a true homeland by carrying out a socialist revolution.

Great October opened the way for establishment of the world's first socialist state, the true homeland of the workers and peasants. According to V. I. Lenin's definition, its characteristic features in those years were the existence of worker-peasant power as the implement of fundamental, revolutionary transformations; liberation of working people from oppression and exploitation; consistent implementation of a policy of true equality and friendship among peoples and combining their efforts for joint reconstruction of the national economy, building a socialist society, and defending revolutionary gains against encroachment by domestic and foreign counterrevolution.

V. I. Lenin related wars in defense of the socialist homeland to his inference on the possibility of a socialist revolution being victorious first in one capitalist country alone and the desire of imperialists of the other countries "for the defeat of the victorious proletariat of the socialist state," for the destruction of its revolutionary center. He set forth the principles of the Soviet State's peace-loving policy and its aspiration for peaceful co-existence with states with different sociopolitical systems. Peace, V. I. Lenin emphasized, creates the most favorable conditions for constructive, creative activity in the name of building communism. "All our policy and propaganda," he wrote "is aimed at putting an end to war, not enmeshing people in war." The Soviet Republic "wishes to live in peace with all people and direct all its efforts to domestic building."

At the same time, foremost among the many important and responsible challenges facing the proletariat of the defeated country was defense of the revolutionary gains. This gave rise to the proletarian party's fundamentally new attitude toward the slogan of defending

the homeland. In the first months of the existence of the Soviet State V. I. Lenin gave convincing grounds for the proposition that the tactics of the proletarian party should change radically with the victory of the Great October Socialist Revolution. As of 25 October 1917, he said, "We are for the defense of the Soviet Socialist Republic of Russia."

Vladimir Il'ich pointed out that "a series of very horrible clashes between the Soviet Republic and the bourgeois states is inevitable. This means that the ruling class, the proletariat, if only it wants to and does rule, must prove this by its military organization." He emphasized that "for defense we need a tough, strong army and a strong rear."

V. I. Lenin showed that as a result of the victory of the socialist revolution Russia had risen to an enormous height in its historical development and found itself in the vanguard of all humanity, assuming the role of pioneer blazing the road to communism. Soviet Russia, he remarked, was being watched by the entire civilized world because it had become the guiding light and hope of the proletariat, of all deprived and oppressed people, of everyone fighting for liberation. Naturally, a war in defense of the socialist republic is a sacred cause, in the highest degree a just cause for the proletariat of all countries.

In the struggle against opportunist elements, the Trotskyites and "left communists," Vladimir Il'ich showed the need to build a strong regular Red Army and determined ways to do it, armed the army with the new Soviet art of war, and worked on the problems of bolstering the defensive might of the Soviet State and most effective methods of defending the socialist homeland. Lenin's genius was the origin of the theses on the unity of the front and rear, means of steadily strengthening them, and transforming the worker-peasant republic into a single military camp and the party of communists from the most peace-loving party into a war party if an enemy, by attacking the socialist republic, made this necessary. The proletarian state can only accomplish the intricate problems of defending the socialist homeland under the leadership of the Communist Party.

V. I. Lenin substantiated the essential points of Soviet patriotism. Beginning from the basic propositions of Marxism concerning the great patriotic spirit of the working people of a socialist state, even before the Great October Socialist Revolution Vladimir Il'ich emphasized that the proletariat, having overthrown its exploiters and established true people's power, would defend it selflessly, heroically, to the last drop of blood.

The Leninist doctrine on defense of the socialist homeland was tested in the fire of the victorious struggle by the Soviet Republic against the interventionists and White Guards in 1918-20. It became a guiding star for the Communist Party and Soviet State during the Great Patriotic War. Guided by it, at the start of the war the Communist Party and

Soviet Government worked out an elaborate program of struggle against the fascist aggressors which revealed the just, all-people's character of the Soviet Union's war and defined concrete steps to crush the enemy.

During the war years the Leninist doctrine on defense of the socialist homeland was embodied and further elaborated in all the most important measures of the Communist Party. In a short time the apparatus of state and military control (the State Committee for Defense, Headquarters of the Supreme High Command), party, Soviet, economic, trade union, Komsomol, and other organizations were reorganized in conformity with wartime requirements, and the Leninist principles of Communist Party direction of the Soviet Armed Forces during wartime were creatively realized. A large majority of communist and Komsomol members left for the front. The most important areas of war work were taken under special control by the Central Committee and the GKO [State Committee for Defense]. Party leaders, including members of the Central Committee, secretaries of the central committees of the republic communist parties, oblast committees, city committees, and kray and rayon committees were sent to these areas. They were appointed members of the military councils of the fronts and armies, did an enormous amount of work among the population in the enemy rear and in underground party organizations in territories temporarily occupied by the fascists, and directed partisan detachments. In all, the party sent 1,640,000 communists to the USSR Armed Forces during the war. 9

Following Lenin's teachings that "to really wage war a strong, wellorganized rear is essential" and "the best army, people completely
devoted to the cause of the revolution, will be wiped out immediately by the enemy if they are not adequately armed, supplied, and
trained" during the war years the party quickly organized the removal of an enormous number of industrial enterprises from threatened
regions to the east and changed the country's entire economy to a
war footing. By the end of the first year of the war the USSR already
possessed a well-organized and fast-growing war industry capable of
supplying the front with up-to-date equipment and weapons in evergrowing amounts. Steps were also taken to provide the army, the population, and industry with needed agricultural products.

Under the leadership of the Communist Party the Soviet people and their valiant Armed Forces inflicted a crushing defeat on Hitler's Germany and its satellites, defended the freedom and independence of the socialist homeland, carried out a great mission of liberation, and honorably performed their international duty.

The great historical victory of the Soviet Union in this war was convincing proof of the vitality and invincibility of the socialist order and the superiority of socialist ideology over the misanthropic ideology of fascism.

It demonstrated the mighty power of the Leninist Communist Party and its role as a true inspirer, organizer, and leader. The policies of the Communist Party and the liberation goals of the war were fully understood and supported by the Soviet people.

In the postwar period the Communist Party made a significant contribution to further development of the Leninist doctrine on defense of the socialist homeland. In the CPSU Central Committee decree of 31 January 1977 it says: "The historical experience of world socialism has enriched the treasury of Marxism-Leninism with new conclusions and theses and expanded the horizons of revolutionary theory and practice. It has irrefutably proven the universal significance of the basic laws of socialist revolution and building a new society discovered by Marxist-Leninist science and first embodied in the experience of October. It has confirmed the necessity of applying these laws creatively, with due regard for the concrete conditions and characteristics of particular countries."11 This applies in full to the theory and practice of defending the socialist homeland which have been enriched by such outstanding documents as the materials of the 25th CPSU Congress, the CPSU Central Committee decree entitled "The 60th Anniversary of the Great October Socialist Revolution," the report by Comrade L. I. Brezhnev, General Secretary of the Central Committee of our party and chairman of the Constitutional Commission at the May Plenum of the CPSU Central Committee, the draft of the new Constitution, and others. question of the essential features and methods of defense of the socialist homeland is analyzed, in light of these documents, with due regard for establishing the basic characteristics of developed socialism, which has been built in the USSR.

The documents worked out by the CPSU reveal the superiority of socialism over capitalism as a social system. Developed socialism today is the highest attainment of social progress.

It follows from the basic features of the socialist homeland that socialist society is a society of real humanism whose primary purpose is to satisfy the needs and hopes of the working people. It is a society of liberated labor, true democracy, true individual freedom, and the most advanced science and culture. It guarantees the human rights to labor, education and recreation, and full employment and creates real opportunities for comprehensive, creative development of all its members; it is a society of social optimism which gives people solid confidence in tomorrow, in the happy future of their children. The socialist state has realized the great dream of humanity's advanced thinkers concerning the most just society, one which gives the people happiness, well-being, and a peaceful, secure life. Such a social order is the source of the inspiration and high morale which motivates Soviet people to heroic deeds in peacetime and in defense of our revolutionary gains. Only socialism is able to rid humanity of oppression, exploitation, and the threat of a devastating world war and insure rapid development of national economies, science and culture, and sovereignty. To do this socialism needs peace, for peace creates the essential

conditions for constructive, creative work. Therefore, socialism and communism are first of all bulwarks of peace. "Our new Constitution," L. I. Brezhnev said in his report at the Plenum of the CPSU Central Committee on 24 May 1977, "will show in a completely convincing way that the first state of victorious socialism has permanently inscribed on its banner the word 'peace' as the highest principle of its foreign policy, meeting the interests of its own people and all the other peoples of our planet." 12

The fourth chapter of the Constitution reads: "The foreign policy of the USSR is aimed at securing favorable international conditions for building communism in the USSR, strengthening the position of world socialism, supporting people's struggles for national liberation and social progress, preventing wars of aggression, and consistently implementing the principle of peaceful co-existence among states with different social systems." 13

The draft of the new Constitution emphasizes that war propaganda is prohibited by law in the USSR. 14

The unprecedented economic might of the USSR is a characteristic feature of the socialist homeland in its present meaning. This might continues to grow as a result of fulfillment of the Tenth Five-Year Plan, the five-year plan of efficiency and quality, acceleration of scientific-technical progress, the rapid rise of labor productivity, and comprehensive improvement of the quality of work in all elements of the national economy.

The rise in the power-worker ratio of the national economy and improved level of technical equipment supply have an enormous effect on the country's economy and defense capability. Suffice it to say that by the end of the Tenth Five-Year Plan we will produce 1.34-1.38 billion kilowatt-hours of electricity, mine 790-810 million tons of coal, extract 620-640 million tons of petroleum and 400-435 billion cubic meters of gas, smelt 160-170 million tons of steel, and produce up to 1.9 million tractors and 1.35 million trucks. 15

That is how the economic potential of the Soviet Union will grow. A step forward will be taken in creating the material-technical base of communism and bolstering the defense capability of the socialist state.

The Leninist doctrine of defense of the socialist homeland is receiving further elaboration based on the new ratio of world economic and political forces. It takes into account the fact that standing against the capitalist world today is not just a single socialist state but a whole socialist system with the most modern military hardware. The defensive might of the countries of the socialist community rests on their fast-growing economies, which surpass the capitalist countries in development. The socialist community today has become the most dynamic economic force in the world and a leading factor in world politics. Whereas the industrial production of the capitalist world has increased

3.1 times in the last 25 years, socialist industrial production has grown 11 times. As a result the socialist share of world industrial production, which was roughly 20 percent in 1950, already surpassed 40 percent in 1975.16

The world socialist system differs by its new internal laws of development. It is a world of true freedom and justice, one which has eliminated the exploitation of one person by another for all time and introduced into international relations new principles which harmoniously combine the demands of peaceful co-existence of states with different social orders, rejection of territorial claims, recognition of the equal rights of peoples and states, and construction of economic ties on the basis of mutual advantage and respect for the sovereign rights and independence of large and small peoples. The socialist system is a brilliant example of the new type of relations among its member countries, relations established on the Leninist principles of fraternal friendship, mutual aid, economic specialization, cooperation among similar means of production, socialist integration, and uniform policies and Marxist-Leninist ideology.

This finds practical embodiment in the long-term economic programs that have been developed and are being carried out, in the cooperation of the fraternal parties in working out complex political problems, in generalizing the experience of socialist and communist building, in working out and elaborating the theoretical principles which enrich the arsenal of Marxist-Leninist ideology, and in the practical activities of the fraternal parties. It is expressed in the close cooperation of the socialist countries in working out uniform views and practical steps for their joint defense within the framework of the Warsaw Pact.

When speaking of the Warsaw Pact, we must emphasize that this alliance of socialist countries differs fundamentally from NATO and the other imperialist organizations which are aggressive, anti-Soviet, and anti-socialist.

The Warsaw Pact is defensive. This organization has no territorial claims. Any country which wishes to struggle to preserve and strengthen the peace may join. Therefore, the Warsaw Pact is entirely appropriate for the mission of defending our socialist gains against the aggressive aspirations of the imperialist states. It does not contradict the program of peace and peaceful cooperation among states with different social orders and it makes provision for detente and reduction in arms and armed forces all the way to complete disarmament.

It is a voluntary alliance of several socialist states who have joined their economic, moral, and military capabilities together to defend the entire system of socialist homelands.

The common principles of military building, leadership of the communist parties in defending socialist gains, and the development of common foreign policy positions aimed at preserving and strengthening the peace which the working people of the socialist countries need for constructive activity make the Warsaw Pact an important tool for avoiding a new world war and the use of means of mass destruction and annihilation.

The enterprising, dynamic quality of the foreign policy of the CPSU and the other fraternal parties of the socialist countries has made it possible to achieve a breakthrough in the development of international relations and set back the threat of a world thermonuclear disaster. More favorable international conditions have been created for constructive activity by the Soviet people and the working people of the other socialist countries and for development of the international struggle for social progress.

The advances made in normalizing the world political climate became possible above all because of the increased might of the Soviet Union and the other socialist countries, their consistent, peace-loving policy, and the persistent struggle for peace of broad popular masses on all continents. The Program of Peace adopted by the 24th party congress and elaborated by the 25th party congress and the tireless activity of Comrade L. I. Brezhnev, General Secretary of the CPSU Central Committee, have played an exceptional part in the struggle for peace and international detente. Measures planned by the party to make detente stable and irreversible are now being carried out successfully. But this does require new efforts by those who fight for peace and international cooperation, for the freedom and independence of the world's peoples.

Comrade L. I. Brezhnev, General Secretary of the CPSU Central Committee, said at the 25th party congress that the enemies of detente and disarmament have substantial resources and are active in different ways in different areas. "Although the opportunities for aggressive actions by imperialism are significantly curtailed today," he stressed, "its nature remains unchanged. Therefore, peace-loving forces must show high vigilance." Although deeply involved in the heroic everyday life of the Tenth Five-Year Plan Soviet people never forget the harsh lessons of the Great Patriotic War, lessons that remind us of millions of dead Soviet patriots, of barbaric devastation, the uncountable losses inflicted on our country by occupation forces. The Soviet people led by the Communist Party are watching the dangerous game of reactionary imperialist circles closely and recognize deeply that their selfless labor is needed not only to build the USSR economy but also to bolster the defensive might of the world's first socialist country.

In his speech at Tula L. I. Brezhnev said, "Our country will never take up the path of aggression, it will never raise a sword against other peoples." This is also reflected in the draft of our new Constitution, which reads: "The Soviet State consistently follows a Leninist policy

of peace and supports strengthening international security and broad international cooperation." But the Soviet Union cannot ignore the fact that each year the NATO countries increase appropriations for military preparation, enlarge the size of their armed forces, establish new military formations, and produce qualitative changes in weapons.

All this forces the Soviet State to be constantly concerned with maintaining its own defensive potential at a level that is entirely adequate to insure the security of the socialist state and of all the countries of the socialist community. Steadily improving means of armed combat is an important feature of the current development of the Soviet Armed Forces. V. I. Lenin taught that a high level of technical equipment in the Red Army is one of the main indexes of its fighting effectiveness. Following Vladimir Il'ich's teachings the party directs special attention to the use of scientific-technical advances to find up-to-date solutions to the intricate problems of building up the USSR defense.

Along with technical supply to the Soviet Armed Forces the Communist Party devotes very serious attention to military-patriotic indoctrination of the Soviet people, especially young people, in a spirit of communist consciousness and readiness for selfless defense of the socialist homeland. At the 25th party congress L. I. Brezhnev said, "Establishing the ideas of Soviet patriotism and socialist internationalism, pride in the land of Soviets, our homeland, and readiness to come to the defense of the gains of socialism in the consciousness of the working people, especially the younger generation, has been and remains one of the party's crucial tasks." ²⁰

In accomplishing this task it is very important to instill working people with a love for our glorious Armed Forces which have covered their banners with unfading glory on the fields of battle. The Soviet Army is a part of our socialist society. The sons of workers, kolkhoz farmers, and people's intelligentsia serve in it. In the military ranks they become toughened and used to discipline, order, organization, and their majestic civil responsibility.

Comrade L. I. Brezhnev, General Secretary of the CPSU Central Committee, said at the 25th CPSU Congress that our army is indoctrinated in a spirit of devotion to the socialist homeland, the ideas of peace and internationalism, and friendship among peoples. Soviet people love their army and take pride in it.

Indoctrinating the fighting men of the Soviet Armed Forces in a spirit of high political vigilance and constant combat readiness is an important area of CPSU activity.

The fact that the party has always devoted and continues today to devote paramount attention to strengthening the defensive capability of the USSR and improving its Armed Forces is eloquently illustrated by the chapter on defense of the USSR which has, for the first time, been introduced into the draft of the new Constitution. It reads: "Defense

of the socialist homeland is a very important function of the state, of all the people. It is the duty of the USSR Armed Forces before the people to reliably defend the socialist homeland and be in constant combat readiness, guaranteeing the immediate repulsion of any aggressor."²¹

And the party is doing everything it can to make the peaceful, creative labor of the builders of communism safe. At the 25th CPSU Congress L. I. Brezhnev said: "No one should doubt that our party will continue to do everything it can to see that the glorious Armed Forces of the Soviet Union continue to have all means necessary to performance of their important mission: to guard the peaceful labor of the Soviet people, to be the bulwark of world peace."²²

FOOTNOTES

- 1. "Materialy XXV S'yezda KPSS" [Materials of the 25th CPSU Congress], Moscow, Politizdat, 1976, p 27.
- 2. PRAVDA 1 February 1977.
- 3. Lenin, V. I., "Polnoye Sobraniye Sochineniy" [Complete Works], vol 30, p 133.
- 4. Ibid., vol 42, p 99.
- 5. Ibid., vol 39, p 366.
- 6. Ibid., vol 35, p 395.
- 7. Ibid., vol 38, p 139.
- 8. Ibid., vol 36, p 342.
- 9. "Istoriya Kommunisticheskoy Partii Sovetskogo Soyuza" [History of the Communist Party of the Soviet Union], vol 1, Bk 1, Moscow, Politizadat, 1970, p 374.
- 10. Lenin op. cit., vol 35, p 408.
- 11. PRAVDA 1 February 1977.
- 12. PRAVDA 5 June 1977.
- 13. PRAVDA 4 June 1977.
- 14. Ibid.
- 15. "Materialy...," op. cit., pp 137, 144.
- 16. PRAVDA 28 May 1977.

- 17. "Materialy...," op. cit, p 24.
- 18. PRAVDA 19 January 1977.
- 19. PRAVDA 4 June 1977.
- 20. "Materialy...," op. cit., p 75.
- 21. PRAVDA 4 June 1977.
- 22. "Materialy...," op. cit, p 83.

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11,176 CSO: 1801 WARTIME TROOP CONTROL IN ARMY DEFENSIVE OPERATIONS DISCUSSED

Moscow VOYENNO-ISTORICHESKIY ZHURNAL in Russian No 8, Aug 77 signed to press 25 Jul 77 pp 20-27

[Article by Maj Gen V. Korshunov, professor and doctor of military sciences, and Col B. Khabarov: "Organizing and Carrying on Troop Control in Army Defensive Operations"]

[Text] During the Great Patriotic War the offensive was the primary form of military action by the Soviet Armed Forces. But defense too occupied a significant place, and in the first period of the war it was the primary type of combat action.

V. I. Lenin pointed out that "Wars which began and ended as completely triumphant offensives have not occurred in world history or they have been exceptions."

The scale of the defense in the last war was significantly greater than envisioned by our prewar views. The questions of how to organize and wage strategic defense and front defensive operations had not been worked out well. Just before the war the main object of attention was organizing and waging an operational defense by a combined arms army. It was assumed that this would be done chiefly in secondary axes to conserve forces and means in the interests of assault groups intended for the offensive. The objective of defense was to defeat superior enemy forces and create conditions for going over to the attack. During the Great Patriotic War, however, major changes were made in these generally correct views. Operational defense began to be carried out most completely within the framework of a front operation, not an army operation as envisioned before the war. Army defensive operations were more often a constituent part of front operation.

During the last war the art of preparing for and waging army defensive operations received further development. Troop control was an important consideration in this. The present article is devoted to certain questions of troop control.

The war experience demonstrated persuasively that the essence of troop control in operations, defensive operations included, involves the activity of the commander, staff, and political and other field control agencies with respect to thorough preparation of the men for combat actions and directing their efforts to successful performance of assigned missions and achieving the objectives of the operation.

Control in army defensive operations covers a broad range of jobs. Among the chief ones are: working out the overall plan, planning combat actions, giving missions to the troops, checking on their performance, organizational work among the troops, and comprehensive battle support. The job of maintaining high troop morale was enormously important, especially in the first period of the war. This factor played a large part in waging army defensive operations during the period of strategic defense. We might remark that under conditions of nuclear missile warfare the moral and psychological stability of military forces will be just as important and in some cases it may be decisive.

In the first period of the war the operational defense of combined arms armies was organized and carried out within the framework of strategic defense where the enemy had the initiative, superior forces, air domination, and the advantage of combat experience. All this added to the suddenness of the attack by the German fascist army sometimes led to serious disruptions of troop control and, consequently, to unsuccessful combat actions. Commanders and staffs accumulated experience during defensive operations and the structure of control agencies and means of communication, as well as the overall system of control, improved. This was facilitated by the activities of the CPSU Central Committee, the State Committee for Defense, the Headquarters of the Supreme High Command, and the General Staff.

In the second and third periods of the war the operational defense of the armies was carried on in part under conditions of deliberate strategic defense, but primarily during a period of ever-growing offense where the Soviet command had taken the initiative and had superior forces and means, domination in the air, and considerable experience. Some army operations were prepared for ahead of time. There would be prolonged preparation before them, during which a stable, deeply echeloned defense would be established. Other operations arose during offensives when the enemy, having concentrated forces, would go over to the counteroffensive and deliver strong counterstrikes.

The work of the army commander and staff in troop control was organized and carried out in dependence on the conditions under which the transition to defense was made (hurried, forced, or preplanned). In all cases the collection of situation data and making the decision to put up a defense were very important measures.

During the war years all the army commanders and their staffs were continuously collecting data on the enemy to learn, by thorough analysis

of information received, his intentions, the grouping of forces and means, the direction of the main strike, and the starting times of attacks. Staffs were constantly trying to provide commanders with information on the disposition and condition of friendly forces as well as the terrain and meteorological conditions.

The primary sources of situation data were: reconnaissance information, reports by commanders and other important figures in large units and their staffs, information from neighbors and the front headquarters. Periodic visits by the army commander, his deputies, and army staff officers for the purpose of studying particular questions in the local areas were important. Thus there was a well-organized system for collection of situation data. It was an element of the overall system of troop control, one of the chief conditions for the army commander to adopt a sound plan.

Adoption of the plan and its dissemination to the troops are, of course, a very important question of control. Experience shows that this is a complex and difficult process, the result of enormous work by a large collective. Adoption of the plan for a defensive operation should always involve a harmonious combination of two factors: the subjective represented by the experience, knowledge, and intuition of the commander, and the objective, which includes a thorough and exact consideration of all the factors in the operational situation. It is common knowledge that several plans may emerge in any specific battle situation. The job of the commander and staff is to adopt the most rational one.

Usually the army commander, after receiving an order or operational directive from the front, then takes it to the members of the military council, his deputies, and the chief of staff, listening to their suggestions and, where necessary, having them or other personnel clarify unclear matters. Only after clarification of the army's mission and careful evaluation of the situation, depending on time available, would the commander make a preliminary plan, and sometimes also the final plan on the map.

The difficult and dynamic conditions of the initial period of the war when the German fascist forces were continuing to develop their offensive predetermined the characteristics of organizing and waging defense and controlling army troops. Poor knowledge of the situation, lack of information on the enemy, poor communications, and unclear orders from higher headquarters often led armies at certain points to undertake unsuccessful attempts to counterattack the enemy instead of evaluating the situation and organizing defense. During combat actions many army headquarters were subjected to direct attacks by enemy tanks and motorized infantry and lost control of their troops. Under such conditions, naturally, commanders adopted plans on the map in a hurry. They were given to the troops by telephone or communications officers, but often they were delivered late. Of course, with that kind of organization of control performance of assigned missions by army units could not be insured. For example, the untimely and unclearly defined

order of retreat of the forces of the 8th Army (commanded by Lt Gen F. S. Ivanov, chief of staff Maj Gen G. A. Larionov) to intermediate lines and organization of a defense at them, as well as the lack of a single plan for getting army units across the Western Dvina River, almost caused the army to be surrounded southeast of Riga.²

In the autumn of 1941, following a Headquarters plan, the armies of the Western Front went over to the defense to prevent the enemy from breaking through in an easterly direction. They established strong reserves using secondary sectors, especially in the Yartsevo-Vyaz'ma axis, the quickest route to Moscow. All armies received concrete combat missions: to set up defense with an indication of the most dangerous axes which had to be strongly defended; to carry out army counterstrikes; to secure boundaries; to rig up antitank areas, and the like. It is true that along with defensive missions some of them were also given offensive missions to improve their tactical position. For example, the 19th Army (commanded by Lt Gen M. F. Lukin, chief of staff Maj Gen V. F. Malyshkin) was ordered to "defend stubbornly and not allow the enemy to break through at the boundary between the 30th and 16th armies" and at the same time to "take the regions of Popov, the woods south of Popov, and Kholm and thus create a stable defense, then prevent the enemy from breaking through in an easterly direction."3 Such a formulation of the mission split the attention of army commanders. And they devoted more attention to the attack than to creating a strong defense. This gave a dual character to commanders' plans. Troops were given aggressive missions first, to attack, and then to defend positions. As a result, units did not have time to carry out engineering preparations on the terrain and, most importantly, to set up a defensive grouping.

Plans for the defense were sometimes adopted while offensive actions were being waged. For example, the 16th Army (commanded by Lt Gen K. K. Rokossovskiy, chief of staff Col M. S. Malinin) of the Western Front in the Smolensk axis received an attack mission on 5 September 1941 and began the offensive, but just five days later, on 10 September, was ordered by the front commander to go over to the defense on the line Kholm, Yartsevo, Solov'yevo.⁴

Under such conditions the army commander and his staff did not have enough time to evaluate the situation, adopt the plan, and deliver it to the army units. Therefore, in the presence of a member of the military council, the chief of staff, the artillery commander, and certain other top personnel he adopted a plan for the defense by the map. In this plan he determined: the regions on whose retention primary efforts had to be concentrated; the operational formation of troops; the combat missions of the units; the order and times for organization of the defense, especially engineering preparations. To achieve practical effectiveness the army commander personally gave missions to the units in the main axis while his deputy delivered missions to the divisions in the secondary sectors, the chief of staff spoke to the

reserves, the artillery commander spoke to artillery units, and the chief of engineer troops spoke to the engineer units.

The Headquarters of the Supreme High Command and the General Staff had an enormous influence in refining the processes of troop control in defensive operations. In March 1942 a new Manual on Staff Field Service was published and distributed to the troops. It summarized accumulated experience in troop control and emphasized the role of the headquarters staff as the commander's primary agency for exercising control.

During the first months of the war the field directorates of combined arms armies were often set in clusters without observing measures of camouflage, security, and defense; sometimes they were cut off from the troops and lost communication with them. They were often attacked by enemy aviation and artillery and suffered substantial losses. The Headquarters VGK [Headquarters of the Supreme High Command] pointed out this weakness in time and stressed the importance of organizing firm control.

In the defensive operations of 1941 and early 1942 when communications equipment was in short supply it was hard to insure continuous control. Moreover, during this period there were significant mistakes by commanders and staffs in the use of radio equipment. In an order dated 23 July 1941 the People's Commissar of Defense demanded that these mistakes be eliminated and troop control improved.

The Headquarters VCK order of 30 May 1942 entitled "Improving the Use of Radio Communications to Insure Troop Control by Radio" was very important. It introduced personal radio sets for commanders in army directorates and these radio sets went with them on all visits to the troops.

The Headquarters VGK directive of 24 July 1942, transmitted directly to the troops, play an especially important part in improving troop control and the use of radio equipment. This directive pointed out:

"Battle experience shows that our troop control remains on an intolerably low level. Unfortunately, we must observe again that most of our commanders continue to consider wire communications the primary type.

"Control is maintained as long as wire communication exists, but as soon as wire communication is broken control is immediately lost. Radio equipment is still used unwillingly, grudgingly. Radio sets are not taken care of, they are kept far from command posts, sometimes in the second echelons of headquarters. Loss of communications is loss of control, and loss of control of troops in battle inevitably leads to defeat!"

Headquarters VGK ordered that commanders and commissars at all levels be personally responsible for the immediate elimination of these shortcomings and organizing reliable control and uninterrupted communications. This Headquarters directive authorized radio transmissions in the clear in certain cases.

Thus, in the first period of the war important steps were taken to improve the troop control of an army in a defensive operation. Control was exercised by the commander and supported by the staff; it took the form of issuing short instructions using communications equipment (primarily wire) and also through personal communication between the army commander and the unit commanders.

In the second and third periods of the war there was further development of the questions of troop control in army defensive operations. Let us review this using the example of the organization and waging of defense in the Battle of Kursk.

In this battle Headquarters ordered the Central and Voronezh fronts to go over to the defense ahead of time. The commanders and staff of the fronts and armies had adequate time to adopt overall plans and plan defensive operations. This allowed them to make a careful, thorough evaluation of the situation and a more precise determination of the composition, grouping, and probable intention of the enemy, which was one of the key conditions for successful planning and conduct of the operation.

During staff work to organize the defense military secrecy was strictly observed and the most painstaking precautions were followed. Battle documents, including maps and diagrams, were generally made in just one copy by the army chief of staff or chief of the operational division personally.

The work of the army commander in adopting the overall plan followed this sequence. First he would hear reports by the commanders and chiefs of the arms of forces and services and the suggestions of the chief of staff concerning organization of the defense and he would adopt a preliminary plan on the map. Then commander's reconnaissance of the terrain from the front to the rear would be carried out. Only after this would the commander, working on the terrain, adopt the final plan. This is how the commanders of the 6th and 7th Guards and 13th, 70th, 65th, 60th, 38th, and other armies worked. Missions were given to the troops, engineering preparations of regions of defensive lines carried out, and so on on the basis of the overall plan. It should be particularly emphasized that communications played an important part in the control activity of the commander and staff. During the most intensive days of fighting in the Battle of Kursk not a single interruption of more than 15-20 minutes was recorded in wire communications. 6

The primary mission of signal troops in the defensive operations of armies at Kursk was to set up trouble-free communications according to a plan which would insure troop control for any variation of troop actions. Wire communication was structured on the principle of axes

using communications nodes, while radio communications followed the principle of networks and separate sectors. This experience deserves the most serious attention under present-day conditions when, on the one hand the dynamic character of combat actions on the defense has increased sharply and, on the other hand, there is significantly greater possibility that elements of the communications system will go out, which inevitably influences the stability of leadership.

It is common knowledge that a high degree of centralization was typical of troop control in the second period of the war. Thus, when organizing the defense armies were told not only their missions, but also the concrete lines of each defensive zone, the necessary density of forces and means, the system of fire and engineering structures, the time and directions of counterstrikes, and so on. This did not limit the intelligent initiative of subordinates, especially in selecting methods of carrying out combat missions. Nonetheless, finding that certain commanders tended toward too much centralization of control, actively intervened in the functions of subordinates, and tried to control troops "over their heads" the Headquarters VGK on 18 May 1943 issued a special directive which sharply condemned this practice.

There is no need to demonstrate that this experience is colossally important under current conditions when preparing and carrying out defensive operations where the role and importance of a skillful combination of centralization and decentralization in troop control are growing immeasurably.

Methods of work are, as we know, determined by the conditions of the situation, above all by the availability of time to prepare for the operation. It was this circumstance that predetermined specific features of the work of army commanders in defensive operations. A very clear relationship can be traced between the working methods of the army staff and the working methods of the army commander. In the first months of the war many army commanders tried to do everything personally when organizing the defense. This naturally led to serious miscalculations both in adopting plans for the defense and in managing troops during combat actions to repel strong groupings of German fascist forces.

In the second and third periods of the war army commanders began to rely more heavily on their staffs, who had gained rich experience and a precise organizational structure and been supplied with better control equipment. These factors were clearly reflected in the quality of control. Documentation related to the defense began to be processed more completely, the planning of the defensive operation was done in a more organized manner, and more concrete answers were found to questions of cooperation and support.

As an example we may take the plan for a defensive operation by the 40th army (commanded by Lt Gen K. S. Moskalenko, chief of staff Maj Gen A. G. Batyunya) at Kursk. The plan set forth the objective and

conception of the operation, the grouping of forces, and variations of combat actions, especially delivering the counterstrike and using reserves. Plans for artillery, engineer, and other types of support were appended to the operational plan.⁸

It should be noted that during the period of preparation of the defense at Kursk the method of personal contact between army commanders and unit commanders was used very widely. The adequate number of means of transportation (aircraft, motor vehicles, and motorcycles) at the disposal of army commanders and staff allowed them to travel to the troops and subordinate headquarters at any time and give necessary instructions for organization of the defense, the system of fire, engineering preparation of positions, and other questions on the spot.

A network of control posts was set up in the armies for firm, uninterrupted management of troops on the defense. Their staffing, location, work organization, timely movement, security, and defense were important functions in staff work. The field directorate of an army was usually divided into echelons. The first echelon was the primary command post (KP). It included the military council, staff, commanders and chiefs of the arms of troops and services, and their staffs (divisions). The second echelon was made up of rear agencies. A reserve command point (ZKP) headed by the deputy army commander was singled out from the KP as were observation posts (NP's). In the first period of the war the army command posts were usually located behind the main zone of defense, 10-15 kilometers back from the forward edge in the location of the reserves; in the second and third periods the command posts would be 15-20 kilometers back, behind the second defense zone. Observation posts were set up in regions which allowed observation of troop combat actions. Depending on the width of the zone of defense an army might have two or three observation posts.

The second echelon of the field directorate of an army was the rear post, which was 30-40 kilometers from the front line, behind the army zone of defense.

Communications was an important element of the control system. The army would set up a primary communications center, a reserve center, and a rear center. Wire communications was the primary means, followed by radio and vehicles.

The command post of an army could be moved only with authorization of the front commander and then only if communications were organized in the new place and the deputy commander of the army or chief of staff assumed control of the troops.

Control was exercised by the army commander personally by issuing orders delivered by communications equipment. He received active help from the chief of staff, who issued combat orders, agreed upon with the commander, in the name of the commander. The commanders of arms of troops and service chiefs usually gave missions to their subordinate units.

During defensive fighting the army staff would continuously collect necessary data on the situation to enable the army commander to reach sound decisions.

We should note that the problem of substantiating the plan as a whole and its individual components has always been a crucial one in the art of war. It becomes especially critical under contemporary conditions. For example, let us take consideration of the ratio of forces for a maximum number of different characteristics. War experience shows that those commanders and staffs who approached this question objectively and did not overstate the capabilities of the sides reached optimal plans for defense and carried them out successfully. Examples were the 16th Army at Moscow, the 62nd at Stalingrad, the 13th at Kursk, among others. By contrast, where the ratio of forces was, for various reasons, not taken into account the defense was ineffective. Instructive examples of this are seen in the defensive operations of the 44th, 47th, and 51st armies of the Crimean Front in May 1942.

Adopting plans for counterpreparation and counterattacks was an important matter in troop control during an army defensive operation.

Artillery counterpreparation is a powerful means of influencing an advancing enemy. Experience shows that it can only be effective after careful planning and precise organization. During the war artillery counterpreparation to cut off an enemy advance was planned and carried out during advance preparation for defensive operations in certain armies. A counterpreparation was first planned in the 20th 16th, and 19th armies of the Western Front in the Moscow-Vyaz'ma defensive operation. There were four variations depending on possible directions of the enemy's main strikes. Up to 300 guns were to be used. In fact it was carried out only in the zone of the 16th Army, allowing the forces of the formation to hold the line for 24 hours.

Counterpreparation was more successful in the Stalingrad and Kursk defensive operations. Overall, however, it was not always as effective as could have been expected. For example, the 13th Army (commander Lt Gen N. P. Pukhov, chief of staff Maj Gen A. V. Petrushevskiy) of the Central Front carried out counterpreparation primarily against the enemy artillery grouping to lessen the force of his firestrike before the attack. The 6th Guards Army (commanded by Lt Gen I. M. Chistyakov, chief of staff Maj Gen V. A. Pen'kovskiy) carried out counterpreparation against an enemy grouping that was prepared to attack. In both cases the counterpreparation followed plans that had been developed.

A somewhat different picture is seen in the organization and conduct of counterstrikes. As war experience shows, their use in army defensive operations brought significant successes to the defending forces. For example, the commanders of the Central Front and 13th Army, having determined the direction of the enemy's main strike, decided to deliver a counterstrike on the morning of 6 July 1943 and restore the position. The counterstrike was delivered by the

XVII Guards Rifle Corps of the 13th Army, the XVI Tank Corps of the 2nd Tank Army, and the XIX Tank Corps. The counterstrike brought about a turning point in the battle. The enemy was halted and in the following days could not continue the offensive. However, this was possible only with painstaking analysis of the situation, timely selection of the moment for inflicting the counterstrike (morning of the second day of the operation to restore the main zone of defense), mass artillery and aviation strikes in support of troop combat actions, and firm, continuous troop control during the counterstrike.

Thus, troop control in defensive operations in the Great Patriotic War was steadily improved by speeding up the collection and processing of situation data, adopting substantiated plans and delivering missions to the troops, and setting up networks of control posts and communications. Many questions of control continue to be important under contemporary conditions and may be applied in troop combat and political training. Taking in a broad range of problems, control became a well-organized system which insured successful conduct of defensive operations by army forces.

Under contemporary conditions, where the scope of missions steadily enlarges while the time available for their performance decreases, the role and significance of a precise system of control have risen immeasurably.

The technical equipment supplied to staffs, especially communication equipment, predetermines continuity and precision of troop control. This is especially important in organizing and waging defense under contemporary conditions.

FOOTNOTES

- 1. Lenin, V. I., "Polnoye Sobraniye Sochineniy" [Complete Works], Vol 44, p 209.
- 2. TsAMO SSR [Central Archives of the USSR Ministry of Defense], Fund 344, Inventory 5554, File 127, Sheets 1-4.
- 3. Ibid., Fund 208, Inventory 10196, File 30, Sheet 115.
- 4. Ibid., Fund 367, Inventory 27, File 5, Sheets 52, 53, 65, 66.
- 5. "Sbornik Boyevykh Dokumentov Velikoy Otechestvennov Voyny" [Collection of Combat Documents from the Great Patriotic War], No 5, Voyenizdat, 1947, p 35.
- 6. "Bitva pod Kurskom" [The Battle of Kursk], Voyenizdat, 1946, p 4.
- 7. Ibid., pp 104-105.
- 8. TsAMO, Fund 395, Inventory 9136, File 142, Sheets 50-54.

9. "Sovetskaya Artilleriya v Velikoy Otechestvennoy Voyne 1941-45 gg." [Soviet Artillery in the Great Patriotic War of 1941-1945], Voyenizdat, 1960, p 59.

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ADMIRAL STALBO ON EMPLOYING AMPHIBIOUS ASSAULT LANDINGS

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[Article by Vice Adm K. Stalbo, Honored Scientist of the RSFSR, professor, and doctor of naval sciences: "The Art of Using Amphibious Landings"]

[Text] During the Great Patriotic War the Navy and Ground Forces carried out numerous landing operations. The art of organizing, preparing for, and carrying out such operations was developed further and refined.

In the summer-autumn campaign of 1941 landing actions were organized on the basis of prewar theoretical views and principles. The landing operation was defined as the most complex combined army and navy operation.

Our guiding operational-tactical documents, the Provisional Field Manual of Naval Forces of the Worker-Peasant Red Army and the Temporary Manual on Waging Naval Operations gave full and complete definitions of preparation, loading troops, crossing the sea, fighting for the landing and on shore, supplying landed forces, questions of cooperation, and the like.

Practically speaking, by the beginning of the Great Patriotic War the Navy and Ground Forces had a fully defined theory of waging landing actions. But there were no specially built landing ships. Marine contingents were completely inadequate; there was just one brigade which had been formed in mid-1940 and was part of the Red Banner Baltic Fleet.

Indeed, throughout the war against fascist Germany our fleets never had the necessary landing ships. The tenders built in Leningrad were slow, rather unseaworthy, and poorly armed; they were used primarily for transportation. As a result, during combat actions we had to adapt various types of cutters, seiners, and launches for landing marines. Significant attention was devoted to forming marine units and at the end of the Great Patriotic War the marines had become an arm of naval forces.

The lack of landing ships and cutters often affected our choice of landing places on an unimproved coastline. The fleet commands had to consider not only the operational-tactical situation but also whether it would be possible to use deep-drawing ships and transports which could not get close to shore. This reduced the rate of landing of the first echelons as well as the build-up of forces and delivery of tanks and artillery. Furthermore, it made landing actions strictly dependent on weather conditions. This forced us to reject the very efficient landing procedure from "shore to shore," which was used widely by Anglo-American forces during World War II. Our landing parties usually followed the diagram "shore-transport, landing vessels-shore" or were landed directly in a port occupied by the enemy (Feodosiya, Kerch', Novorossiysk, Osipenko, Linakhamari, and others).

The shortage of means of air cover for ships and troops being landed influenced the nature of landing operations in the first period of the war. To some degree this circumstance dictated our choice of the time and place for landing the troops. Landing points were chosen within the operational radii of action of fighter aircraft.

During the last war the naval art of preparing for and conducting landing operations and battles developed significantly. We should single out the following questions: planning, preparing for, and conducting landing operations in an operational element at the level of front and fleet headquarters; landing troops and equipment on an unimproved shore, that is, one without docks; cooperation between landing parties and ships and close support aircraft; the use of different methods of action by the tactical groups — the landing forces and the troops being landed; organizing party political work and control in all elements, and others.

It is typical that landing actions were planned and carried out in all periods of the Great Patriotic War in conformity with the situation at the time. For example, the largest landing operation of the Great Patriotic War, the Kerch'-Feodosiya operation, was carried out in 1941-42. The Black Sea Fleet landed an operational landing party consisting of two armies on the Kerch' Peninsula and right in the port of Feodosiya. This operation was carried out during the period of the counteroffensive by our forces at Moscow, Rostov, and Tikhvin and during the fascists' second assault on Sevastopol'. The Crimean Front and the Black Sea Fleet in cooperation not only pinned down but also significantly hurt the forces of Manstein's 11th German Field Army, which stagnated in the Crimea for a long time and was unable to participate in the offensive on other fronts.

It is important to note that our fleets carried out landings in both the period of strategic defense and the period of strategic offensive. In the first period of the war when the Soviet Army was retreating and waging active defense more than one-third of the landings were carried

out, that is, 35 percent of the total number during the Great Patriotic War. In these actions 57,000 men were landed. 1

One cannot fail to observe here, as analysis shows, that the military commands of the United States, England, Germany, and Japan in World War II carried out marine landings only during their strategic offensives. That was the way of the Japanese, whose landing activity really stopped in January 1943, in other words, before they switched to strategic defense. The same applies to the Americans and English, who were bold enough to land significant landing parties only after the strategic initiative had passed to the Soviet Armed Forces in the West and American naval forces in the Pacific.

The experiences of our amphibious landings provide evidence of the great daring of our command's operational plans, their ability to use all forces, means, and opportunities, and their inventiveness in searching for ways to accomplish major missions in complex and unfavorable situations.

An important feature of the art of amphibious landing actions is the landing to participate in wiping out major enemy groupings on land and pinning down reserves where the enemy has superiority in forces in the landing region. Virtually all landing parties in these circumstances accomplished their missions.

Support by main naval forces for landed troops and using specially trained marine subunits and units in the first waves of the landing party were enormously important. In this respect the most typical examples were the Novorssiysk amphibious operation and the landing in Linakhamiri.

In addition, our landing parties did not face counteraction during the sea crossing because the crossings were generally made in one night and the fascists did not have time to bring their ships in. This was the case, for example, in the defense of Odessa, when marines subunits were landed near the village of Grigor'yevka during the night before 22 September 1941, in the Northern Fleet landing in the Zapadnaya Litsa region on 14 July 1941, in the Pikshuyev Cape region on 28 April 1942, and others. During the actual landing, however, enemy counteraction from shore and especially from the air was very strong. Battle experience confirmed that landing parties needed reliable air cover.

A distinguishing feature of the landings is different preparation times, from 1-2 to 10 and more days. In the first period of the war the short periods of preparation for most landings were dictated by rapid changes in the situation which demanded immediate landings. For example, the

Based on an analysis of data on landings of landing parties contained in the summary reports of the fleets. Central Naval Archive, Fund 6, File 11242, 33324.

troop commander of the Transcaucasian Front allotted six days to prepare for the Kerch'-Feodosiya amphibious landing operation. In the second and third periods of the war the time allotted to prepare for landings depended on the plans of offensive operations in the coastal axes. Amphibious landing missions were given ahead of time (20 days for Novorossiysk, 14 days ahead for the landing on the west coast of the Dnestr estuary, and 10 days ahead for the landing in the Tuloksy River region).

Most of our landings were tactical, that is, small forces were landed in the tactical zone of the enemy's seacoast defense and they performed tactical missions (a marine battalion and company on the west bank of the Zapadnaya Litsa Bay on 16 July 1941, a reinforced marine company in the Strel'ny region on 3-8 October 1941, a marine detachment in Petergorf on 5 October 1941, a marine regiment in Yevpatoriya on 5-6 January 1942, and others). The landing points were not far from bases. Therefore, the loading, sea crossing, and actual landing were carried out in a short period of time. The rapid rates of advance by our forces in coastal axes also demanded short periods of preparation for and conduct of amphibious landings. It was possible to land landing parties with only short-term preparation because the marines and allocated rifle units maintained a high level of readiness. For example, the swift advance of the Southern Front along the shore of the Sea of Azov in 1943, by units of the Leningrad Front in the Vyborg region in the summer of 1944, and in the region of Tallin and Moonsund in the autumn of the same year required numerous amphibious landings. They came literally one after an-In June and July of 1944 alone 14 amphibious landings were carried out in the Vyborg Gulf region.²

Of course, the rapid actions of our landing forces were also made possible by the high level of operational and combat training of staffs, the substantial experience accumulated by the fleets, and the precise work of all support elements.

The preparation for and landing of amphibious landing parties went on in an atmosphere of exceptional secrecy which was achieved by introducing effective camouflage measures and misinforming the enemy. This helped achieve surprise and a quick break through the enemy's antilanding defense. In this respect the most typical amphibious landings were the landings in the port of Feodosiya, on Pikshuyev Cape, in Novorossiysk, on the islands of the Bjerks Archipelago, in Linakhamari, and a number of landings by the Pacific Ocean Fleet.

Surprise in breaching the antilanding defense and bringing in the landing parties was achieved by swift maneuvering at sea and attacking on land both with and without artillery and aviation preparation, and directly attacking the docks of ports occupied by the enemy.

² Central Naval Archive, Fund 85, File 11284, Sheet 735.

A typical example was the Novorossiysk landing operation of 1943; it is a remarkable case of combining the possibilities of fire, maneuver, and a swift strike from the sea. In the Kerch'-Feodosiya operation a cruiser, three destroyers, a minesweeper, and patrol boats unloaded the landing party right on the enemy-occupied docks of the port of Feodosiya. The objective of this landing was to strike at a place the enemy did not expect. This method of action is certainly the ultimate in boldness, daring, and inventiveness. When we say that there were no hard and fast rules in the actions of landing forces and that operational-tactical procedures varied, we also have in mind the use of torpedoes to destroy enemy fire points and the use of smoke screens, shore artillery, camouflaged flights by aircraft, dummy and diversionary landings, and the like. All of these things promoted surprise and swiftness.

It is important to note that steps to achieve surprise in landing the landing party became especially important. These measures were defined during development of the plan for each operation or battle because the landing party had to be landed on a shore controlled by the enemy, where the enemy would objectively have an advantage, relying not only on naval forces but primarily on a pre-established defense. If the intention of an operation was discovered the enemy could concentrate forces in a certain sector beforehand, set mines on the approaches to it, and inflict a series of strikes against the landing party during its sea crossing.

An analysis of amphibious actions in the last war shows the creativeness of planning for all measures to achieve surprise in the concrete conditions of the particular operation. Some steps were taken in every landing to achieve camouflage and misinform the enemy. They can be generally represented as follows:

- Scattering ships, floating craft and troops before the landing in small groups in particular bays, ports, and harbors. For example, in the February 1943 landing in the region of Yuzhnaya Ozereyka and Stanichka the detachment of cover ships was deployed from Batumi, the transports carrying troops and security forces came from Tuapse, and the detachment of landing vessels and artillery support ships came from Gelendzhik;
- 2. Publication of false directives and orders with deliberately inconsistent contents. Thus, during preparations for the Novorossiysk landing operation the headquarters of the North Caucasus Front published a special (false) directive concerning preparations for a landing in the Yuzhnaya Ozereyka region and took steps to see that the enemy would learn of it.³ In addition, a diversionary reconnaissance detachment was landed there;
- 3. Organizing demonstration actions concurrently in several axes in the given sector of the theater (the landing in the Yuzhnaya Ozereyka-Stanichka region in February 1943, the landing in Malaya Volokovaya Bay in October 1944, and others);

³ VOYENNO-ISTORICHESKIY ZHURNAL 1970, No 3, p 21.

- 4. Conducting air reconnaissance and strikes against points located on a broad front, as was done in the Novorossiysk landing operation in September 1943 and many others;
- 5. Secret crossing by ships and landing vessels with regrouping and assembling at starting points. For example, in the Novorossiysk landing operation the landing vessels assembled at three points in Gelendzhik Bay; in the Yuzhnaya Ozereyka-Stanichka operation they assembled in Tuapse and Gelendzhik;
- 6. Carrying out false maneuvers and crossings by ships, as was done in the Kerch'-Feodosiya landing operation in December 1941;
- 7. Camouflaging the movement of landing detachments in the landing region using noise screens created by specially allocated aircraft. For example, in the Novorossiysk landing operation seven IL-4 planes delivered a bombing strike to drown out the noise of the motors of the vessels carrying the landing party while other aircraft flew across the line of the front, drawing the enemy's attention away from Tsemesskaya Bay;
- 8. Establishing extremely rigid rules for using means of communication, which was done in all landing actions;
- 9. Working out several variations of operations and limiting the number of staff workers working on the variation of the operation to be actually used (Novorossiysk landing operation).

When combined intelligently and carried out at the proper time all these measures made it possible to achieve operational and tactical surprise in amphibious landings, which was an important factor in successful accomplishment of the mission.

In the Great Patriotic War naval art was enriched by experience in organizing control during amphibious landing actions. In landings with participation by naval, ground, and air forces substantial attention was devoted to working out cooperation among landing forces, ships, and air-The basic document was the planning table of cooperation which was developed by the staffs of the front and fleet with participation by the staffs of large units of ground forces, ships, and aviation. Questions of cooperation were most fully worked out in the Novorossiysk Kerch'-El'tigen, and Kurile landing operations. For example, at Kerch'-E1'tigen, plans called for the involvement of 612 aircraft from four air armies of the North Caucasus Front and 389 aircraft from the air forces of the Black Sea Fleet. To support the amphibious landing on the islands in Vyborg Gulf 702 aircraft from the air forces of the Baltic Fleet and the 13 air armies of the Leningrad Front were enlisted, while 2 assault and mine-torpedo divisions and a fighter regiment were used for the landing on the Moonsund Islands. In addition to air preparation aviation was used to cover the forces of the landing party in the loading region, during the sea crossing, and in the landing region as well as for reconnaissance and support of landing troops on

shore. The final objective was always defined as accomplishment of missions on land, and therefore the forces being landed were objectively the main forces. While they were on the landing ships, however, the chief naval officer had full responsibility for their timely crossing and landing.

In view of such close relationships among different command levels the problem of control in landing actions during the last war was resolved as follows. In landing operations general leadership was exercised by the superior army officer, usually a front or army commander (the Kerch'-Feodosiya operation, the amphibious landing in the Kerch' region in January 1944). While tactical landing parties were being put ashore overall command was provided by the senior naval officer, usually a fleet commander (the landings in Grigor'yevka and Linakhamari).

The location of the command post of the commander of forces in an operation was correctly determined; it was the shore command post.

However, when tactical landing parties were put ashore the command post of the landing commander was located on a ship or on shore. (The command post was on a destroyer during the Grigor'yevka landing, on a cruiser at Feodosiya, and on shore in the landing on the coast of Malaya Volokovaya Bay). The command post always had means of communication which guaranteed reliable control of all elements of the operational formation or battle formation, in other words, ships, aviation, the landing party, and reserves, and insured collection of all necessary information.

Correctly organized and skillfully conducted party political work played a large part in the success of landing actions during the Great Patriotic War. Thanks to purposeful, correctly coordinated efforts the commanders and political agencies of army units and ships took account of the specific features of work in army and navy conditions and achieved a high level of working effectiveness. An important characteristic of party political work in landings was its operational character, which was dictated by the short periods of time available to prepare for and carry out amphibious landings.

Meetings between personnel and troops who had participated in landing operations earlier, appeals by military councils, leaflets written for landing troops, and other such measures were used extensively.

Commanders and political agencies directed special efforts to moral-psychological preparation of landing forces from rifle units. They were distinguished by boundless daring, massive heroism, persistence in working toward objectives, and decisiveness in action. The commanders, political workers, and party and Komsomol organizations deserve great credit for instilling these qualities in Soviet fighting men. All fighting men were highly conscious of their military duty to the homeland and yearned to destroy the hated enemy.

In conclusion we should observe that amphibious landings, which constituted a significant part of the combat activity of the Soviet Navy during the Great Patriotic War, left us with rich experience which can also be used in present-day combat training conditions.

During the war a critical need for special landing vessels and definite marine contingents was revealed. The exceptional role of aviation in landing operations and gaining air superiority in the landing region must also be emphasized. Aviation was a crucial striking force in battles for the landing and in supporting landing parties on shore. The battles in the El'tigen region in 1943 provide an especially good example of its importance. There our ground-attack aircraft helped the landing party drive back 37 counterattacks by enemy infantry and tanks on 1-3 November while air transports provided them with ammunition, food, and medicine. The need for comprehensive support, including navigation and hydrographic support, to landing parties became very clear.

Experience demonstrated the importance of achieving a high rate of landing for all echelons of the landing party to insure seizure of the necessary beachhead in the face of growing enemy resistance. An important measure here was increasing the striking force of the first echelon of the landing party.

The combat experience of landing parties in the Great Patriotic War showed that it can be very important for a successful landing to conduct it not just in twilight, as recommended by prewar theory, but also, when possible, at night.

The heroism and selflessness of Soviet marines and landing forces, victors over a powerful enemy, was particularly clear in amphibious landings.

The experience of World War II and local wars in the postwar period shows convincingly that amphibious landings are an important and inalienable part not only of armed struggle at sea but of most military actions in general. Roughly 60 percent of the local wars unleashed by the imperialist aggressors since World War II have been wars in which the naval forces of the United States and its allies in the aggressive military blocs have taken a very active part, above all by carrying out amphibious landings (the aggression in Korea, in Vietnam, against the Dominican Republic, Egypt in 1956, and others).

Most of the joint exercises of NATO Armed Forces in recent years have included various types of landing actions. With them the bosses of NATO are striving to work out tactical, operational, and strategic missions.

Achkasov, V. I., and Pavlovich, N. B. "Sovetskoye Voyenno-Morskoye Iskusstvo v Velikoy Otechestvennoy Voyne [Soviet Naval Art in the Great Patriotic War], Voyenizdat, 1973, p 141.

Despite the aspirations and efforts of the peace-loving forces headed by the Soviet Union the aggressive circles of imperialism continue to step up the arms race. One way has been the construction of new landing ships and every possible kind of landing means based on postwar scientific and technical advances. We are referring to ships built on principles of dynamic support. Their use, it is felt, will introduce many new features and bolster the capabilities of the troops being landed. The United States is also continuing to develop its marines, which are the nucleus of its amphibious forces.

All this provides reason to believe that landing actions will continue to be a constitutent part of armed struggle at sea.

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USE OF WARTIME EXPERIENCE IN AIR TRAINING EXERCISES DISCUSSED

Moscow VOYENNO-ISTORICHESKIY ZHURNAL in Russian No 8, Aug 77 signed to press 25 Jul 77 pp 44-51

[Article by Lt Gen Avn N. Ostroumov, docent, candidate of military sciences: "War Experience and Aviation Exercises"]

[Text] There are many forms and methods of assimilating and applying the combat experience of the air force. Among them air exercises should be singled out. They permit fullest use of the experience of the Great Patriotic War in training the personnel of units and subunits. In this article it seems useful to us to review some questions of the conduct of air exercises during the war and using this experience in the postwar period.

During the Great Patriotic War air exercises were one of the forms of ascertaining the most advisable air force organizational structure and revealing the quality of the operational and combat training of small and large units. Depending on the scale of the exercise it would be organized by the command and staff of the Soviet Air Force, the command and staff of an air army, air corps, division, or regiment.

We should first discuss the exercises whose purpose was to determine the most advisable organizational structure for the air force and the operational air reserves of Headquarters, Supreme High Command and to check the combat readiness of the latter after their formation but before going into action on some sector of the Soviet-German front.

It is common knowledge that at the start of the war aviation was organized in the air forces of the fronts and armies. This scattering of forces made it impossible to use aviation en masse. Substantial losses in the first days revealed that with the structure of that time aviation could not accomplish operational missions.

The limited-composition reserve air groups of the VGK [Supreme High Command] which were formed at the very start of the war were also unable to significantly affect the course of combat actions. Assigning a

sprinkling of crews, subunits, and reserve regiments to the aviation units of particular axes could only partly make up for ongoing aviation losses. A search was made for more expedient organizational forms for air forces and the aviation reserves of the VGK. In 1942 the search led to the creation of aviation formations in the form of air armies within the composition of the fronts. As for the Headquarters air reserves, at first reserve air groups were formed and then came mobile air groups and even air armies of the VGK.

However, subsequent study and combat experience demonstrated the need to have VCK reserves in the form of separate air corps and divisions. These units were included for a certain time in the composition of air armies operating in a particular axis. Upon completion of the operation they would be concentrated in other axes.

To some extent the conclusions reached on optimal organizational structure resulted from conducting air exercises. In October 1942, for example, air exercises by three newly formed air corps (ground-attack, bomber, and fighter) were held at one of the training ranges near Moscow by order of I. V. Stalin.

General direction of the exercise was assigned to Lt Gen Avn G. A. Vorozheykin, deputy air force commander. The attacking side was commanded by Lt Gen Avn V. A. Sudets and the defenders were commanded by Lt Gen Avn Ye. M. Beletskiy. The attackers (the bomber and ground-attack air corps) were supposed to operate continuously against targets "on the field of battle" in support of ground forces breaking through the main zone of defense, while the defenders were to repulse their attacks in time.

The actions which were in fact practiced at the range were a prototype of the air offensive which was later used in the counteroffensive at Stalingrad. During air preparation at the exercises a concentrated bomber attack was delivered first followed by air support during which the ground-attack group, one plane following another, successively destroyed targets located at different distances from the provisional front line.

The exercises were observed by Mar SU K. Ye Voroshilov, member of the Politburo of the Central Committee of the All-Soviet Communist Party (Bolshevik), and the top leaders of the General Staff and air force staff of the Soviet Army. The results were reviewed in the office of the Supreme High Commander at the Kremlin. Summarizing the results, I. V. Stalin ordered that flight-tactical exercises be organized at the ranges before the air units of the RVGK [VGK Reserve] were sent to the front. 1

In many cases the exercises of the air corps of the RVGK were conducted in cooperation with ground forces. In April 1943, for example, an exercise was organized for the VII Composite Air Corps (commanded by

Maj Gen Avn P. P. Arkhangel'skiy) and the 10th Tank Brigade, while in May there was an exercise of the II Ground-Attack Air Corps (commanded by Maj Gen Avn V. V. Stepichev) with the 39th and 43rd combined arms armies. As a result the air corps of the RVGK received a kind of "pass to the front."

Experimental air exercises during the war enabled our command to ascertain the advisability of using certain aircraft, weapons, and ammunition.

In 1942 the flight-tactical exercise at the range and subsequent use at the front method was followed in testing the fighting capabilities of the LAGG-3 fighter armed with a 37-millimeter cannon. The exercise was conducted in the 42nd Air Fighter Regiment of the 1st Air Army.

In December 1932 near one of the suburban Moscow airfields a test was begun of the operating effectiveness of aerial antitank bombs.² They were later used successfully by ground-attack air units to wipe out fascist tanks in the Battle of Kursk.

In 1944 the 130th Air Fighter Division (commanded by Col F. I. Shinkarenko, today colonel-general of aviation) of the 1st Air Army of the 3rd Belorussian Front tested the modernized A. S. Yakovlev (Ya K-91), which was designed not only for aerial combat but also for delivering bomb strikes at ground targets, during an air exercise.

Simulation of operations, which was done by front commanders and leader-ship personnel by running through forthcoming actions with models and sandboxes to represent the terrain, operational formation, and battle formations of friendly forces and enemy forces, was very important in preparation for actions. Using the model the front commander would work out questions of tactics and the interaction of operational formations of ground forces and aviation. The same questions would be the center of attention during commander's reconnaissance of the terrain at the forward edge. In addition, exercises were held to work on aviation interaction with combined arms (or tank) units applicable to the conditions of forthcoming combat actions.

An example of this might be preparation for the Iasi-Kishinev operation of units of the III Guards Ground Attack Air Corps (commanded by Lt. Gen Avn V. V. Stepichev) of the 5th Air Army and the 2nd Ukrainian Front. The situation and targets which ground-attack aircraft were to destroy upon breaking through the enemy defense (artillery batteries, strongpoints, tanks, antiaircraft batteries, and the like) were reproduced at division training ranges.

During the exercises unit commanders checked the actions of pilots and taught them the most effective ways to hit the targets without suffering losses. Joint actions by pilots and tank soldiers were practiced at combined exercises with mechanized and tank units under conditions approximating those of combat.

During preparation for the East Prussian operation the 1st Guards Ground-Attack Air Division (commanded by Col S. D. Prutkov) of the 1st Air Army conducted intensive combat training in which due regard was given to the complex meteorological conditions of the autumn-winter period. At the exercise they worked on flying at low altitudes with different group compositions and sharpened their skill in changing rapidly from squadron (eight aircraft) actions to strikes in pairs and flights (four aircraft) with worsening weather.

On 30 December 1944 this division held an air exercise jointly with the II Guards Tatsinskiy Tank Corps on the subject "Close Support by Ground-Attack Aviation for Tanks Fed Into a Breakthrough." At the range the planes operated in groups of two and four. This was the most expedient group composition for complex meteorological conditions. In the course of the operation subsequently precisely such groups were used to carry out strafing attacks.

Exercises were used to work on fire cooperation between ground-attack aircraft and tanks on the field of battle, redirecting aircraft to new targets in the depth of the enemy defense, and altering the combat formation of IL's during flight, and joint actions by an operational group of the 1st Guards Ground-Attack Air Division and the headquarters of the II Guards Tank Corps.

In the 303rd Fighter Air Division and the 6th Guards Bomber Air Division (commanded by major generals of aviation G. N. Zakharov and G. A. Chuchev) pilots learned to deliver strikes against airfields and wipe out enemy aircraft in the air. Similar exercises were held in other air divisions.

When we say that conditions at an exercise must maximally approximate real conditions we always recall the war. Even in the face of ceaseless combat actions our aviation rear services found time and opportunities to prepare training areas which were much appreciated by the pilots. Later, finding themselves on the field of battle, the pilots no longer felt themselves newcomers. They were greatly assisted by flights over the region of combat actions, commander's reconnaissance (with the combined arms commanders and artillerymen) of the terrain lying in front of the forward edge of the enemy defense, painstaking practice of the problems of tactics and cooperation using the sandbox, and finally, by pilot testing for readiness to perform concrete combat missions.

Personnel for control posts and aircraft guidance were trained in exercises and at special assemblies. Special attention was devoted to training air controllers, aviation representatives, and the operational group which were to sustain continuous cooperation between aviation and other forces.

Reviewing the topics of air exercises in those days one sees that the main questions were the tactics of actions, aviation cooperation with

ground forces, and winning air superiority. The time available to prepare for and conduct exercises was ordinarily extremely limited. It seems advisable to us to employ this wartime experience under present conditions. When giving headquarters missions for the development of exercises it would be desirable to allocate shortened time periods for them. This will also allow an improvement in the methodological level of staff officers and in their ability to organize and support combat actions.

Thorough party political work was carried on during wartime exercises. It was outstanding for its highly concrete, directed character. The goals of this work included improving the political, moral, and psycological training of aerial fighters. Propagandizing the skills of pilots, navigators, aerial marksmen, and technicians and instilling a deep hatred for the enemy mobilized all the personnel of aviation units taking part in exercises to exemplary performance of missions in the forthcoming battles.

Each pilot knew that during the training flights he had to find the target, carry out a skillful maneuver to avoid antiaircraft artillery, and wipe out the target. Pilots were proud to report fulfillment of the mission at exercises. Operational news sheets reported this every day. An understanding of their full responsibility for successful actions forced all personnel in aviation units to prepare carefully for the forthcoming operation. This sense of responsibility should be an example for the younger generation of airmen today.

In the postwar period, beginning with 1946, air exercises were held regularly, usually together with units of other branches of the Armed Forces. They were used to check the most important elements of troop combat training and work through questions of operational art and tactics under current conditions, but with due regard for the experience of the Great Patriotic War. Questions of cooperation with ground forces and gaining air superiority remained paramount.

Today too ground forces conducting battle have an interest in air support because aviation can wipe out mobile objects on the field of battle such as nuclear missiles, tanks, artillery, and manpower.

At the Dvina maneuvers (1970) fire preparation was carried on for a precisely set time. Unring it artillery and aviation delivered coordinated strikes. The primary missions for aviation were to detect and wipe out enemy nuclear weapons, command and observation posts, tanks, and antitank weapons, that is, important and, in most cases, mobile targets.

As the attack began the force of the air strikes steadily increased. This is the meaning of cooperation: to intensify fire from the air precisely when ground forces need it. When artillery fire fell silent aviation began to operate more actively. Groups of airplanes and

helicopters would usually appear. The pilots helped the artillerymen by reporting from the air the coordinates of targets which the artillerymen immediately brought under fire. In their turn, the artillerymen guided airplane crews to the targets. In addition, artillery and missile forces delivered joint strikes aviation against enemy antiaircraft missile launchers and antiaircraft artillery.

Let us recall the Great Patriotic War. Before the start of the Belorussian operation in June 1944 22 enemy antiaircraft batteries were detected by air reconnaissance in the zone of the 3rd Belorussian Front. They were all destroyed or neutralized during artillery and air preparation for the attack. This allowed pilots of the III Ground-Attack Air Corps (commanded by Maj Gen Avn M. I. Gorlachenko) and the 1st Guards Ground-Attack Division (commanded by Col S. D. Prutkov) to begin effective support for the attack by ground forces and to continue the support in depth. At exercises today too enemy air defense weapons and means of control which have been discovered are subjected to strikes, making it easier to support advancing forces later. The troops have developed a rule: when air support is called in, help it neutralize air defense forces and means in the region of the planned air strike on the field of battle.

During the Great Patriotic War IL-2 (or IL-10) ground-attack airplanes always appeared over the field of battle at difficult moments and struck enemy guns and tanks with continuous attacks from the "circle" battle formation. Today helicopters can perform these missions too. Under present-day conditions typical helicopter support missions involve taking off from nearby fields, flying in at low altitude along a route coordinated with artillery, arriving at a line which precludes the possibility of counteraction by air defense, and an unstoppable strike against the targets which are hindering the troop advance.

Here is an example of successful actions by combat helicopters in exercises in the Northern Group of Forces involving crossing a water obstacle. The enemy on the opposite bank was stubbornly holding onto the positions he occupied. Lt Col A. Demin's helicopter group appeared suddenly and carried out a precise, effective strike. During the review of the exercises Col Gen O. Kulishev, commander of troops of the Northern Group of Forces, had high praise for their actions. 5

Fighter bombers have operated just as well at exercises. They have carried out somewhat deeper strikes, but in coordination with artillery.

Aviation representatives and air controllers have learned how to call out aviation quickly and guide it to ground targets in the course of battle. The ability to perform this mission precisely given high aircraft speeds has not been mastered by all aviation officers. Thus, at a certain exercise Maj N. Lysenko, air representative (liaison) in ground subunits, was unable to carry out the guidance exactly. As a result the strike did not produce the expected effect.

As the Dvina and Dnepr exercises demonstrated, our air subunits have mastered procedures for dropping airborne parties when crossing water obstacles. 6

At the Dvina maneuvers tactical parties landed on the enemy side operated very skillfully. A party commanded by Capt A. Sinenko was landed by helicopter to prevent the approach of reserves. Operating under winter conditions the pilots demonstrated great skill in navigating and landing the helicopters exactly at the assigned place.⁷

Thorough preparation usually preceded the landing of landing parties. Above all this meant air reconnaissance, which made it possible to reveal the air defense system on the flight routes and in the landing region, to detect the approach of reserves in time, and to determine the capabilities of enemy aviation from nearby airfields to counter the landing party.

At the Dvina maneuvers a division with light and heavy weapons was dropped in the enemy rear in 22 minutes. 8

At the same time front aviation assisted units leading the attack from the front as well as supporting the landing party which was waging action in the depth of the enemy defense until the approach of the main forces.

Experience in using tactical airborne landings during the last war was used at these exercises and maneuvers. Showing a high level of military skill and courage the landing parties captured enemy airfields and railroad centers and destroyed his garrisons.

Thus, relying on war experience, questions of crossing water obstacles involving dropping (or landing) airborne landing parties have been worked on.

The new jet aircraft are being mastered by the younger generation of pilots. Making use of the wartime experience they are developing new, improved methods of action and tactical procedures and achieving high subunit combat readiness. The Air Force has many aerial marksmen. At the Dvina exercise, for example, Capt I. Goncharenko's squadron hit its targets from all types of maneuvers.

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At the same exercise the aviation of the North Troops demonstrated its ability not only to deliver precise attacks and reliably cover friendly troops against an air enemy, but also to evade enemy strikes in time, repulse surprise air attacks, and smash enemy airfields. 9

The air exercises conducted in the postwar period have shown that wartime experience, antiaircraft-evasion maneuver in the air, camouflage, surprise, determination, and activism in combat actions, continue to be important today in the struggle for air superiority. Thus, at an

exercise in 1970 the fighter planes of the squadron commanded by Maj A. Andreyev engaged enemy aircraft in battle. They fought pair against pair, flight against flight. The battles unfolded over a considerable air space. The pilots of A. Andreyev's squadron, who were more active and determined, emerged victorious. 10

At another exercise where strikes against an airfield were practiced Capt V. Pavlov's flight distinguished itself. 11 On instructions from the exercise leader the crews made a flight to their full range, landed at an unfamiliar airfield, and in a very short time left to perform the combat mission. Approaching the enemy airfield in concealed fashion and overcoming the counteraction of their defense the flight carried out a swift attack, hitting the target-aircraft accurately at their parking places. Pilots Capt A. Kuznetsov and senior lieutenants V. Alimov and A. Ostapenko operated in just the same way in strafing an enemy airfield. 12

Wartime experience indicates that successful actions against airfields are impossible without carefully conducted aerial reconnaissance. Taking advantage of the predawn darkness air scouts would break through to the depth of the enemy disposition at treetop level and photograph important objects. The air scouts of Capt Yu. Tislinetskiy and Sr Lt Yu. Zhelnin operated in exactly the same way at a certain exercise. 13

Just as was true during the Great Patriotic War, the struggle for superiority in the air has reached its greatest extent during the period when ground forces are performing their primary missions. Many participants in the South exercise in 1971 remember that major battles unfolded in the air, and they were what promoted the successful offensive by ground forces.

It is commonly known that being more combat-ready than the enemy was a decisive factor throughout the war. Victory went to the one who was able to get into the air and drive off the attack faster, who was more skillfully prepared, whose planes had the better fighting characteristics, who saw the enemy first and attacked him unexpectedly, or who had more airfields and was able to camouflage them. These and other elements were decisive components in combat readiness and they are still important today. Many air exercises of the postwar years exemplify this. At the Dnepr exercises in 1967 our airmen gave an example of high combat readiness.

Commenting on the exercise KRASNAYA ZVEZDA wrote that the large group of fighter bombers had just landed at the front airfield when the command post of the aviation unit received new reconnaissance data telling that the enemy was going over to the offensive. The commander, officer V. Korochkin, who is now a lieutenant general of aviation, did everything he could to prepare the group as quickly as possible to take off and wipe out the detected cluster of tanks. Soon the group of missile planes under his command was in the air. They traveled the entire route at low altitude, in complete radio silence, carried out a maneuver the enemy

did not expect, opened fire suddenly, and a significant number of enemy tanks were destroyed. The attack was stopped. 14

In short, the group operated in a wartime fashion.

These elements of tactics show a combined consideration of the increased effectiveness of air defense and the experience developed in the Great Patriotic War in carrying out surprise maneuvers and delivering unexpected strikes.

Creating a situation which maximally approximates that of combat at exercises is one of the requirements which follows from wartime experience. It applies above all to the methodology of conducting air exercises. And indeed, at each of them the main thing has been the endeavor to create the most realistic and instructive situation for combat actions.

Mobile tactical training ranges have been envisioned with bases that change as forces move forward or withdraw. The mock-ups at the ranges (tanks, nuclear weapons, artillery, and the like) are carefully camouflaged.

At aviation training grounds (airfields) special mock-ups of aircraft, control posts, runways, and air defense weapons have also been made. Because air exercises usually have two sides, this has made it possible to create a complex situation and intensity in combat actions. Under such conditions victory comes hard and is achieved through the high level of military art of the commanders.

Experience obtained during the war with party political work is also used extensively today by political agencies and party organizations during air exercises. Instilling absolute devotion to the homeland, a desire to perform one's military duty as our fathers did during the war, steadfastness and courage, a desire to steadily improve military skills and master weapons and equipment outstandingly — this is by no means a complete list of the areas of party political work at present-day exercises involving airmen.

Leaders and all participants were always present at reviews of exercises. The actions of the subunits were analyzed at them and positive aspects and mistakes were noted.

After air exercises were conducted conclusions were drawn concerning the readiness of aviation subunits to wage combat actions under the current conditions; conclusions on the extent to which flight personnel had mastered combat equipment were especially important.

Then a new phase of intensive work by commanders, political workers, staffs, and flight and technical personnel to improve combat skill would begin. This enabled aviation units to raise themselves to new, higher levels of combat readiness and master modern aviation weaponry.

So winning air superiority, the art of aviation cooperation with ground forces, constant readiness to begin actions under conditions of surprise enemy attack and carrying out careful aerial reconnaissance are some of the questions from the time of the Great Patriotic War which continue to be important today. 15

Typical features of new tactical actions by aviation are broad use of low altitudes, the employment of various weapons and procedures to neutralize strong air defense, reaching the target by surprise, usually destroying it on the first run, antimissile maneuvers, and diverse battle formations.

Today, during preparation for the 60th anniversary of the Great October Socialist Revolution, a campaign has unfolded to increase the effectiveness of air exercises. Unquestionably, one of the lines of action in accomplishing this task will be creative use of wartime experience with due regard for new conditions, new aviation equipment and tactics, and the requirements of combat and political training for airmen.

FOOTNOTES

- 1. "TsAMO SSSR" [Central Archives of the USSR Ministry of Defense], fund of the I Guards Ground-Attack Air Corps, Inventory 517117, File 1, Sheets 9-11.
- 2. VOYENNO-ISTORICHESKIY ZHURNAL 1969, No 9, p 73.
- 3. AVIATSIYA I KOSMONAVTIKA 1975, No 2, p 22.
- 4. KRASNAYA ZVEZDA 11 March 1970.
- 5. Ibid., 11 February 1977.
- 6. The Dnepr exercises of 1967 were dedicated to the 50th anniversary of the Great October Socialist Revolution.
- 7. KRASNAYA ZVEZDA 11 March 1970.
- 8. Ibid., 12 March 1970.
- 9. Ibid.
- 10. Ibid., 5 August 1970.
- 11. Ibid., 14 August 1970.
- 12. Ibid., 2 July 1972.
- 13. Ibid., 5 August 1972.

- 14. Ibid., 19 October 1967.
- 15. Ibid., 7 April 1970.

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IMPROVEMENTS IN FACILITIES OF AIR BASES DESCRIBED

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 9, Sep 77 signed to press 1 Aug 77 p 37

Article by Major General of Aviation A. Kondiaglo, Deputy Chief of the Rear of the Soviet Air Force: "Model Upkeep of Air Bases"

Text Having deeply studied and warmly approved the plan for the USSR Constitution, the VVS Air Force personnel see in it the embodiment of the historical results of the six decades lived by our people on the path to reorganizing society and working-class achievements.

The Communist Party and the Soviet government, at the same time that they are equipping the armed forces with modern weapons and combat equipment, are paying continuous attention to improving the living conditions, way of life, leisure time and rest of service personnel, including those in the Air Force.

In recent years much has been done on providing public services and amenities to air bases. Housing, schools, stores, child and medical institutions, clubs and dining halls have begun to answer modern needs. Barracks have been changed beyond recognition. They have all the facilities required for quartering personnel and maintaining their way of life. Hard-surfaced roads, sidewalks, and sport and child areas are being built and open areas are being planted in shrubs and trees.

A great amount of work has been done in the VVS units in connection with the All-Army competitive inspection for the best unit administration and services of the armed forces and in preparation for the All-Army conference on improving the way of life of personnel. The final results have not yet been tabulated. However, one can already say with certainty that the socialist competition unfolded for the air personnel has helped to create the most favorable conditions for improving the professional skills of the personnel and further increasing combat readiness.

The competitive inspection has shown that the majority of our commanders, political organs and staffs are skillfully managing the work of maintaining housing, barracks and public resources in perfect order. The

work experience of the subunits commanded by the officers A. Logvinenko, I. Kosterev, A. Panchenko, V. Chapov, A. Fedorov and others merits special attention. Here the command and the party and Komsomol organizations have mobilized the officers, warrant officers/praporshchiki/, NCOs and enlisted men, members of the families of military personnel, housing committees, and wives' councils to organize public services and amenities of the land areas and parks, and putting barrack and service facilities in order. Skilled craftsmen have done much work on improving the interior of dining halls, officer and enlisted clubs.

It should be noted that now the organization of the public services and amenities of the bases is being conducted continually, in accordance with long-range plans. As a result, each base receives its own individual, unique appearance.

The officers, warrant officers and family members of one helicopter subunit used Saturdays, Sundays and also duty-free time to equip a nice children's facility on base with pavilions, sandboxes, shade awnings, swings and merry-go-rounds. All of the buildings at the facility have been decorated with carved figures. The work of equipping the facility touched everybody, united people, and allowed them to know and appreciate one another.

The personnel of the subunit headed by the officer M. Martynenko has shown a great deal of initiative in improving the living conditions and comfort in the barracks. It must be noted that the building is an old structure. However, now everything has been put into perfect condition here. The order which has been established is being strictly maintained by the personnel. This has a positive influence on increasing military discipline.

Soviet Army personnel have contributed greatly to the common cause during the competitive inspection. A majority of them are highly skilled specialists in operating boiler, water-pumping and sewage stations and electrical networks and workers from housing managements, dining halls and other institutions.

Praise must go to the unit because of N. Petrovskiy, a member of the Soviet Army, who competently organized the operation of electrical lines and installations, and also the struggle for the economical expenditure of each kilowatt hour of electric power. The substitution of ordinary lamps for mercury-arc and fluorescent lamps, the introduction of remote control with outdoor illumination of open spaces, warehouses, sites and roads permits yearly savings of around 2,000-2,500 rubles.

The experience of the chief of the heating plant, army man I. Satsko, also merits attention. He and his helpers, at minimum cost and in strict conformity with specifications, re-equipped the central boiler room for new types of fuel and thoroughly prepared it for operation under winter

conditions. A crew of electricians headed by the crew foreman, army man I. Lukovenko, completed the preparation of electric lines and electrical units ahead-of-schedule and in a high quality fashion. For many years this team of communist labor has been insuring the reliable operation of the electrical networks.

Army personnel O. Karavanova and Yu. Matveyev manage the dining halls. It must be said that these dining halls are comfortable, the food is tastily prepared, and the personnel of the subunits are served very well.

However, one should not think that everything has already been done and that things are going well at all of the air bases. Unfortunately, some commanders and chiefs do not fully use the available resources for further improving the living conditions of the airmen and for providing public services and amenities to the base areas.

It is necessary to keep in mind that this work will be continued after the results of the competitive inspection for the best military management are tabulated. Therefore, it is necessary to analyze everything that has been done, to concentrate attention on the unresolved tasks, and to be armed with the best.

Preparations for winter are in full swing now. In accordance with established traditions, they are organizing practical courses on preparing housing, service and special resources, boiler, pumping and engineering networks and airfields for winter. Specialists who conduct practical exercises on the most complex problems of winter operation have been asked to participate in these courses.

VVS personnel are striving to meet, in an appropriate fashion, the 60th anniversary of the Revolution, to fulfill creditably the high socialist obligations and, through their own conscientious toil and economical attitude toward the expenditure of material resources, to assist in further increasing the combat readiness of the units and subunits.

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AIRCRAFT MAINTENANCE PROCEDURES DESCRIBED

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 9, Sep 77 signed to press 1 Aug 77 p 36

Article by Lieutenant Colonel L. Mazyrin: "From TECh--With a Guarantee"

/Text/ The servicemen arrived at the TECh/technical maintenance unit/ early in the morning. Engineer-Captain D. Makarenko reminded the specialists of the time limits for carrying out periodic technical servicing, he paid attention to the quality of the operations, discipline and the extent of organization. The chief of the TECh did not dwell on details now. The servicemen received similar instructions the day before and they knew very well what to do and how to distribute their time.

The plane was brought to the hangar. The points were ready to start work without delay. Of course, it is not a simple matter to insure that the work be accomplished across the board. However, a large amount of know-how had already been amassed at this excellent TECh. A progress chart had been made up which included the real potential of each specialist. On it were stipulated both the successive steps in carrying out the operations as well as an exact calculation of time. The following is how it looks in practice.

All teams are trained to carry out periodic technical servicing. Moreover, let us say, the electrician specialists, if it is necessary, help the people working on instrumentation and they, in their turn, help the electricians. As an example, the communist warrant officer/praporshchik/ B. Parfenov from the weapons crew is now helping a mechanic from another team who is busy putting slotted strips on the wing center sections. Aircraft and engine specialists are assisting the people who are checking the aircraft's AO/aviation equipment/.

The periodic technical servicing team chief can, under such circumstances, move his personnel to one or another stage in aviation equipment maintenance. This progressive labor management device makes it possible to broaden the repair capacity significantly and to speed up the process of carrying out operations while still maintaining their high quality.

It was not always this way. Earlier each specialist was concerned only with the narrow circle of his own specific job. What permitted the use of this new system? First of all, there is the training of broadly-based specialists. The chief of TECh and the party and Komsomol organizations are continually striving so that the personnel become proficient in allied specialties and achieve interchangeability. And they do this. For example, praporshchik N. Shishov, the chief mechanic of the periodic technical servicing team, has mastered three allied specialties and the communist praporshchik L. Pis'mennyy works on practically all teams. The communist praporshchik A. Kotlyarov is classified as a skilled specialist and has a wealth of experience. All of these people are industrious, take their jobs very seriously, and are achieving ever newer and newer successes in the socialist competition.

It is gratifying to see them continuously helping their younger comrades and passing on their know-how to them. Such teachers have apt students. Specialists from the fitters' team, PFCs A. Kovalev and M. Sazonov, have also mastered allied specialties. Now Kovalev often must work on the aviational equipment team and Sazonov on the plane's airframe. They always carry out all operations with a high degree of quality.

They are working mightily in the subunit to achieve rigid savings in time. The periodic technical servicing of each aircraft must be carried out not only in a high-quality fashion but also within established time limits. The chief of TECh, Engineer-Captain D. Makarenko, secretary of the party organization Captain of Technical Service L. Gnitiyev, and the Komsomol activists are watching to insure that there will be no violations. Moreover, they are constantly investigating possibilities for shortening these time limits and for effectively using each minute that is applied to the job. A characteristic example follows.

After loading the landing-gear shock absorber strut, a specific time delay is required to allow the mixture to settle. What else can be done to the aircraft during this period of time? In line with the TECh chief's instructions, experienced specialists timed the work of the forward mechanic. It seemed that very much could be done if everything was thought out. For example, wash the wheel roller bearings and pack them with lubricant, check to see if there are cracks in the landing gear leg, and carry out a number of other technological operations. All of this was considered and was included on an operational chart which permitted the very effective utilization of time. The subunit's innovators are also concerned with increasing the quality of labor, and carrying out periodic technical servicing within the time limits specified in the progress chart. They are trying to improve the working conditions of the specialists working on the aviational equipment operation. Senior Lieutenant of Technical Services Yu. Sheherbinin, praporshchik V. Deulin, army members N. Martynov and M. Lishenko as well as other servicemen are playing an active part in this work efficiency project. During last year alone, about 20 innovations which found wide practical utilization were developed and put

into operation. Specifically, Lishenko developed a board for checking radio tube performance which increased the labor productivity of monitoring the condition of these tubes by two-three times. Another one of his suggestions was an attachment to the tube aging device. Tubes operate for a specific number of hours in accordance with technical specifications, and then they are installed in the aircraft's radio set. Their reliability is increased in this way.

The party and Komsomol organizations are devoting a great deal of attention to the activities of the innovators, they are helping the TECh chief to train qualified specialists, to improve their professional skills and to broaden their technical horizons. The party and Komsomol activists are not limiting themselves to large-scale measures, but are conducting individual work among the people and are making efforts so that each specialist fittingly fulfills the socialist obligations undertaken in honor of the 60th anniversary of the Revolution and works creatively and enthusiastically.

Many service personnel have decided to obtain a master or specialist first class rating. Among them are the communists A. Fomin, A. Kozyavka, V. Deulin, L. Pis'mennyy and others. Engineer-Captain Makarenko is constantly interested in how his subordinates are trained for the examinations, what difficulties they experience, and what assistance they need.

It happens that individual air force personnel do not display sufficient persistence in fulfilling the socialist obligations which have been undertaken. Thus, praporshchik Yu. Ivashov did not use all of his resources to increase his own military and technical knowledge and, hence, did not always carry out the aircraft periodic technical servicing with a high degree of quality. The chief of the TECh spoke with the secretary of the party organization about this. They always act in concert on any matter, using those forms and methods for training and educating their subordinates which bear the best results.

"Let's hear Ivashov's story at the praporshchik council," Captain L. Gnitiyev suggested.

It was decided—it was done. His service comrades severely questioned Ivashov about his neglect and demanded that he radically change his attitude toward his own responsibilities and personal training. At the praporshchik council incidentally, they also had to reply to A. Serge. He also worked poorly at studying his equipment. As in Ivashov's case, the critique helped Serge to improve. He started to take a more exacting attitude toward his duty and his self-education and he soon achieved noticeable success.

The chief of the TECh and the subunit's party and Komsomol activists are not overlooking even the slightest shortcomings and are exposing them in a timely fashion and collectively eliminating them. In the competition

in honor of the 60th anniversary of the Revolution, the personnel of the TECh were selected to hold the title of "outstanding subunit" for the fifth time. Each person is making his own worthwhile contribution to the success of the team. Thanks to the TECh personnel, there have been no cases in the unit of equipment being out of order, and this is a basic indicator testifying to the multi-faceted activities of the airmen. If it was done at TECh, it was done with a guarantee.

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TRAINING OF AIRCRAFT MAINTENANCE PERSONNEL DESCRIBED

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Article by Engineer-Colonel V. Nefedov: "Technical Training Is Indispensable"

Text Modern aviation equipment places very great demands on the professional training of IAS/engineer aviation service personnel. The skill of each specialist acquires special importance. Training exercises are used, along with the usual technical training lessons, to improve it. They are indispensable.

I will describe the experience of a certain unit which achieved marked success in mastering a new missile-carrying aircraft. They paid much attention here to the management and techniques of conducting technical training exercises. They are preceded by practical exercises conducted by a group of specialists or by each of them separately. The purpose of the exercises is to show the young mechanic and technician the sequence of operations in carrying out one or another piece of work and to impart sound skills to them. All of the IAS personnel continue to improve these skills during the technical training exercises. They are organized creatively, each one different from the other, and they take into account the categories of specialists and their skills in aircraft maintenance. The themes of the training exercise are based on problems which airmen have to solve while preparing an aircraft for the next flight shift or in carrying out periodic technical servicing.

In order to increase the effectiveness of the training exercise, they tabulated the errors committed by IAS specialists while maintaining aviational equipment. An analysis of their causes allows them to avert similar mistakes in the future. The shortcomings observed in the training exercises are considered and analyzed. They can show up during work on an airplane. This is much more dangerous then.

The damage caused by each error increases incredibly under modern conditions. The inferior work of one specialist can adversely affect the resolution of the established task, create conditions dangerous to the life of the flight

If, for example, the flight personnel have to conduct a bombing exercise, then the armament specialists must equip the aircraft with ammunition. In that case it is obligatory for practical training to be conducted in a training exercise wing. This helps one to act quickly and competently in the work process at the airfield, to strictly observe all safety and precautionary measures, and to prepare the aviation equipment for flights with a high degree of quality.

Today there is no disagreement on the importance of technical training exercises. However, they are managed in different ways, and here and there they are simple formalities. Otherwise, how can one explain such a statement, for example: why, they say, do they train young technicians and mechanics if they just finished their studies? Such an attitude toward a training exercise is incorrect. In school the students carry out practical exercises under totally different conditions and while being observed by instructors. In the unit, the technician and mechanic must prepare the aircraft for flight on his own and he must conduct a complicated series of checks and general systems and instrument inspections on it. Here everything must be done in minimum time periods, or else a delay in take-off is possible.

This factor, as experience shows, prevails among young specialists. If they do not possess good habits, then they can commit mistakes, especially during the maintenance of third-generation aircraft which differ significantly from their predecessors. Without habits enabling them to carry out all operations on the aircraft with speed and accuracy, it is impossible to provide high reliability to aircraft equipment maintenance on land and in the air. Such habits are strengthened during training exercises. It is not difficult to be convinced of this by the example of Private I. Seleznev.

Once the chief of the maintenance crew entrusted him with loading the cannon. The young mechanic who had recently arrived in the wing, was not able to handle this task. He had not been trained in carrying out such operations and, not having good habits, he acted stupidly. Through the fault of the mechanic, the value of the flight mission to the crew was reduced. A worthwhile training exercise could have averted trouble.

Aviation engineers, deputy wing commanders for IAS, flight technicians and maintenance crew chiefs should always remember that specialists do not have a chance to do the same work on an airplane every day. Depending on the circumstances, it can be totally different. Before beginning to work on the plane, it is necessary to be carefully prepared, and good training is essential for this. Such a thing happens when the serviceman has gotten used to doing things incorrectly because he has not had a controlled training exercise for a long time, and gradually loses his former skills. Even experienced specialists commit errors of established rules in carrying out operations on complicated aviational systems. This once again stresses the urgency of technical training exercises.

crew, and lead to the putting out of operation of one or another of the plane's systems. That is why the importance of the technical training exercise in working out the proper actions of the specialist on combat vehicles is so vital today.

Such exercises are also valuable because they are conducted in specially equipped classrooms and bases, and sometimes at hard standing areas. Moreover, the serviceman graphically sees what must be done and how it must be done during the operation of one or another of the missile carrier's systems.

Work is going on in the unit to renovate the training exercise equipment. Engineer-Majors V. Moskalenko and A. Parkhomenko and Captain of Engineering Service Yu. Zavid'ko have demonstrated great initiative. Captain A. Seleznev made the original testing unit.

The regimental commander, staff officers, party and Komsomol activists, understanding that engineering and technical training nowadays cannot be limited only to group exercises, are organizing purposeful, individual instruction, systematic training exercises, for each airman. They enlist the services of experienced officers and the best teachers to conduct the individual training exercises here. Finely-tuned technical training helps the personnel of the leading unit to master successfully the complex equipment, to carry out, with high quality, the missions on land and in the air, to be in the vanguard of those competing to put into practice the resolutions of the 25th CPSU Congress and for greeting, in a fitting manner, the 60th anniversary of the Revolution.

The effectiveness of the training exercise depends largely on the selection of a theme, the preparation of the director and the place where it is conducted. An analysis of the failures exposed in the operating process and the mistakes made by personnel in maintaining aircraft are used in determining the theme of the training exercises and the level of the professional training of the IAS specialists is considered.

They concluded in the unit that the best thing was to begin the training exercise by developing elements and different operations, and then, as the personnel acquired positive habits, to move to training exercises on systems. Sometimes an operational technical training exercise is organized here. Usually it is conducted by the specialists from the maintenance crew or in an individual fashion, if one of the workers committed an error while preparing aircraft for flights or while carrying out periodic technical servicing of them.

Such intense attention to the training and work of each officer, warrant officer/praporshchik, NCO and enlisted man and to the growth in professional skills aids in the competent maintenance of fighter bombers while solving the varied training and combat problems.

Of course, tedious and single-minded work is necessary to get training going successfully. A time and a place and trained directors are required. It is not always successful to conduct a training exercise during intensive flight activity. However, during a ground training period, such exercises may be organized in any squadron and unit.

Moreover, an analysis of the troubles uncovered in aircraft equipment during general checks and inspections shows that many of them have been caused by mistakes of specialists during a check of construction joints and units. These are the most widespread: the screw locking device for turning off things, particularly the cable tank joints, the coupling nuts of the pipe connectors, the thrust screws of the reinforced joint clamps, an error in selecting the diameter and in folding the lockpin pressure prongs, and also in the selection and assembly of safety washers, etc.

The technical training exercise helps to improve the habits and professional skills of the IAS specialists and assists in increasing the quality and effectiveness of using new technology in flights.

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